

Applicant: Tseng et al.
Application No.: 10/758,628

Amendments to the Claims:

1. (cancelled)
2. (currently amended) The ferroelectric memory structure according to ~~claim 1~~
claim 10, wherein said substrate is a silicon substrate.
3. (original) The ferroelectric memory structure according to claim 2, wherein
said silicon substrate is a p-type silicon substrate.
4. (original) The ferroelectric memory structure according to claim 2, wherein
said silicon substrate is a n-type silicon substrate.
5. (currently amended) The ferroelectric memory structure according to ~~claim 1~~
claim 10, wherein said insulating layer is made of $\text{Ba}_x\text{Sr}_{1-x}\text{TiO}_3$, wherein the x is in
a range between 0.3 and 1.
6. (original) The ferroelectric memory structure according to claim 5, wherein
said insulating layer is doped by MgO.

Applicant: Tseng et al.
Application No.: 10/758,628

7. (currently amended) The ferroelectric memory structure according to ~~claim 1~~
claim 10, wherein said plurality of oxide electrodes are made of LaNiO_3 .

8. (currently amended) The ferroelectric memory structure according to ~~claim 1~~
claim 10, wherein said ferroelectric layer is made of $\text{Bi}_x\text{La}_{4-x}\text{Ti}_3\text{O}_{12}$, wherein x is in
a range between 0 and 1.

9. (currently amended) The ferroelectric memory structure according to ~~claim 1~~
claim 10, wherein said plurality of metallic electrodes are made of one of noble
metals selected from a group consisting of Pt, Ru and Ir, and an oxide electrode
containing a perovskite structure and comprising one selected a group consisting of
 LaNiO_3 , SrRuO_3 , BaRuO_3 and $\text{YBa}_2\text{Cu}_3\text{O}_7$.

10. (currently amended) ~~The ferroelectric memory structure according to claim~~
~~10,~~

A ferroelectric memory structure, comprising:

a substrate;

an insulating layer formed on said substrate;

a plurality of oxide electrodes formed on said insulating layer;

Applicant: Tseng et al.
Application No.: 10/758,628

a ferroelectric layer formed on said insulating layer and said plurality of oxide electrodes; and

a plurality of metallic electrodes formed on said ferroelectric layer and corresponding to said plurality of said oxide electrodes;

wherein said plurality of metallic electrodes respectively have a first electrode area, and said plurality of oxide electrodes respectively have a second electrode area, wherein a ratio of said first electrode area to said second electrode area is less than 1/12.

11-37. (cancelled)